

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

April 18, 2016 3:21:48 PM

Page 2

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Arm

Start Date: 4/21/2016 **Start Qty:** 8.00 ***g***

Cust Item ID:

Required Date: 5/6/2016 **Req'd Qty:** 8.00 ***Q***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID

Tool #	Plan Code
--------	-----------

**Accept
Qty**

Reject Qty

Reject Number

**Insp.
Stamp**

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.80

Quality Control

MCJ APR 21 2016

MS APR 21 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
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								Lead hand / Supervisor Approval Verification																																																							
								QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	☐ No Re-verification	☐ Operator	☐ Offset/Setup	☐ Supplier	☐ Training	☐ Use for Testing	☐ Poor Information	☐ Rushing	☐ Product Improvement	☐ Process Improvement	☐ Manufacturing Process	☐ Past Due	☐ Pressure/Forced	☐ Bending	☐ Centre Not Concentric	☐ Cracks	☐ Crimp/Kink/Ripple/Wave	☐ Cuffs	☐ Crushing	☐ Heat Treat	☐ Wave/Twist in Tube	☐ Marks/Chatter	☐ Temperature/Cure	☐ Set-up	☐ BOM/Route	☐ Broken/Damage/Defect	☐ Inspection Incomplete/Unqualified	☐ Contamination	☐ Countersink	☐ Cut Too Short	☐ Instructions Incomplete/Unclear	☐ Drill Holes	☐ Power Loss/Surge	☐ Folio/Program	☐ Grain	☐ Weld	☐ Wrong Stock Pulled	☐ Out of Sequence	☐ Off-set	☐ Mislabeled	☐ Fit/Function	☐ Misaligned/off center	☐ Positioned Wrong	☐ Outside Dimensions	☐ Over/Under tolerance	☐ Part Incorrect	☐ Part Lost/Missing	☐ Part Moved	☐ Drawing	☐ Finish	☐ Misread	☐ Turning Sequence
																								OTHER : _____																																							

Picklist Print

April 18, 2016 3:21:53 PM

Page 1
/

Work Order ID: 144461

144461

Parent Item: D3589-1

D3589-1

Parent Item Name: Arm

Start Date: 4/21/2016

Required Date: 5/6/2016

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A 08-05-29 new issue DD verified by:EC IPP Rev:B 09-02-20 rev.b asper dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TR0.375W.065		Purchased		No		100	f	27.2178	1.65	13.26633			

M304TR0 375W 065

304 RD Tube .375 x .065W

FF APR 18-2016

Location

Loc Qty

Loc Code

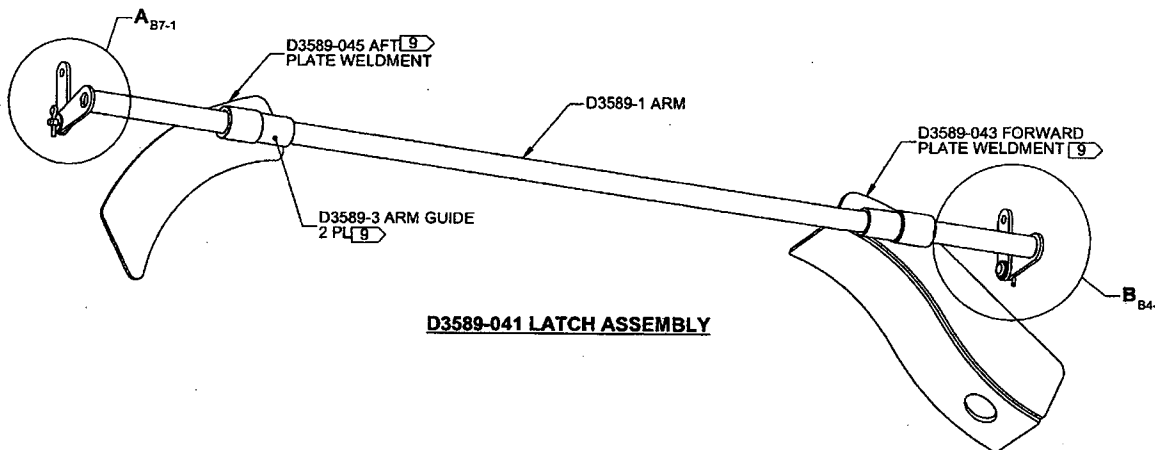
MAT018

27.2178

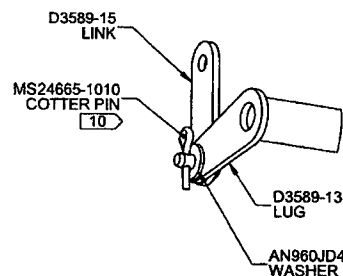
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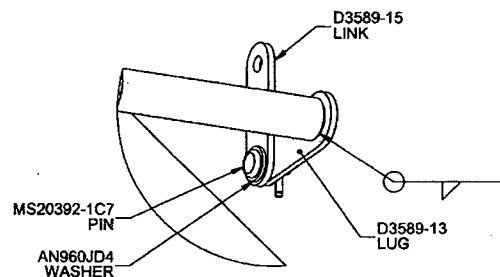
13.26633



D3589-041 LATCH ASSEMBLY



DETAIL A: LINK ASSEMBLY DETAIL
SCALE 2X
2 PL



DETAIL B: WELDING AND LINK ASSEMBLY DETAIL
SCALE 2X
2 PL

ITEM	QTY.	P/N	DESCRIPTION
	X	D3589-041	LATCH ASSEMBLY
1	1	D3589-043	FORWARD PLATE WELDMENT
2	1	D3589-045	AFT PLATE WELDMENT
3	1	D3589-1	ARM
4	2	D3589-3	ARM GUIDE
5	2	D3589-13	LUG
6	2	D3589-15	LINK
7	4	AN960JD4	WASHER
8	2	MS20392-1C7	PIN
9	2	MS24665-1010	COTTER PIN

- D3589-041 NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3589-041" AND B/N "BXXXX" PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
 - 7) WEIGHT: 0.75 lbs
 - 8) WELDING: PER DART QSI 004 USING DT9033
 - 9) IDENTIFIED PARTS ARE LOOSE ON D3589-1 ARM
 - 10) INSTALL COTTER PIN IN ACCORDANCE WITH MS33540

RELEASED
2012-07-16

20160418
SU 144461

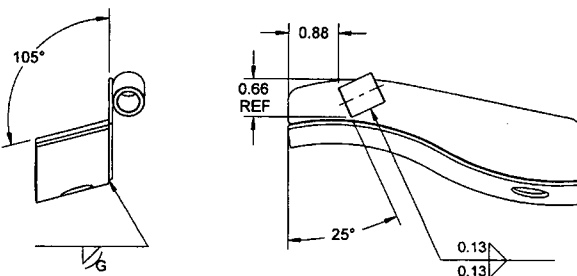
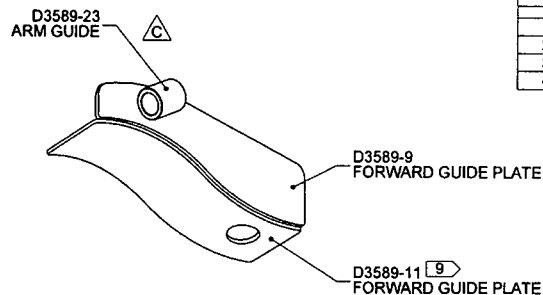
C	REVISED D3589-6: 2.75 WAS 3.00 (ZN B6-4); ADDED D3589-21 (ZN B3-4); AFFECTS D3589-041 (ZN A7-3) AND D3589-049 (ZN A3-3); REVISED D3589-15: Ø 0.140 WAS Ø 0.129 (ZN B4-7); 0.800 WAS 1.150 (ZN C4-7); ADDED D3589-23 (ZN C3-4); AFFECTS D3589-043/045 (ZN D7-2 AND D2-2); REASON: PART 12-177.	MB	12.07.04
B	0.80 AND 0.63 REF WERE 1.87 AND 0.60 (ZN C6-2); 0.50 WAS 1.89 (ZN C3-2); 0.75 REF REPLACES 2.01 (ZN C2-2); 29" WAS 15" (ZN B2-2); 19.00 WAS 18.88 (ZN D4-4); REDESIGNED D3589-9 (ZN A8-6) AND D3589-11F (ZN C2-3) REASON: REDESIGN FOR PROPER FIT AND TO MATCH TESTED CONFIGURATION	MB	08.08.25
A	NEW ISSUE	MB	08.05.29
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	12.07.04		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

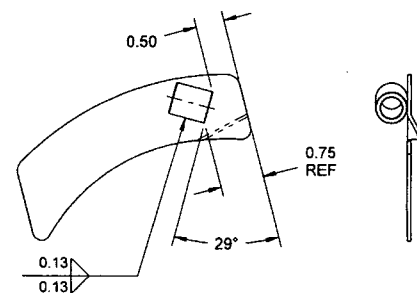
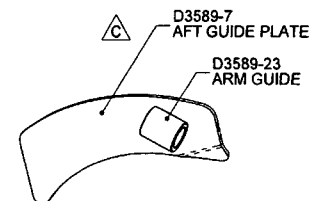
DRAWING NO. **D3589** REV. C
SHEET 1 OF 8
TITLE **LATCH ASSEMBLY** SCALE NTS

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ITEM	QTY -043	QTY -045	P/N	DESCRIPTION
	X		D3589-043	FORWARD PLATE WELDMENT
		X	D3589-045	AFT PLATE WELDMENT
1		1	D3589-7	AFT GUIDE PLATE
2	1		D3589-9	FORWARD GUIDE PLATE
3	1		D3589-11	FORWARD GUIDE PLATE
4	1	1	D3589-23	ARM GUIDE



D3589-043 FORWARD PLATE WELDMENT



D3589-045 AFT PLATE WELDMENT

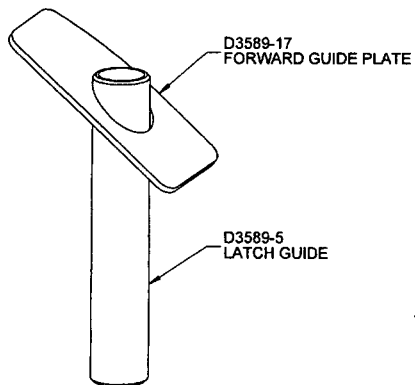
RELEASED
2012-07-16

D3589-043/-045 NOTES:

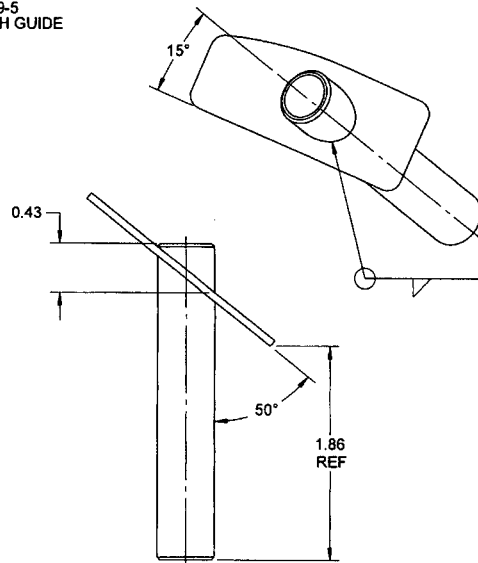
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT:
 - D3589-043 = 0.23 lbs
 - D3589-045 = 0.10 lbs
- 8) WELDING: PER DART QSI 004 USING DT9033
- 9) FORM D3589-11 TO FIT D3589-9 MATING EDGE

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3589	REV. C
MFG. APPR.			SHEET 2 OF 8
APPROVED		TITLE LATCH ASSEMBLY	SCALE
DE APPR.			NTS
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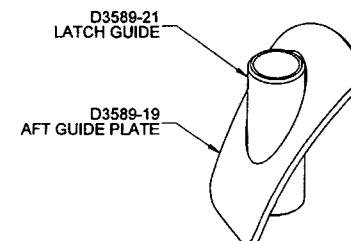
ITEM	QTY -047	QTY -049	P/N	DESCRIPTION
	X		D3589-047	FORWARD GUIDE
		X	D3589-049	AFT GUIDE
1	1		D3589-5	LATCH GUIDE
2	1		D3589-17	FORWARD GUIDE PLATE
3		1	D3589-19	AFT GUIDE PLATE
4		1	D3589-21	LATCH GUIDE



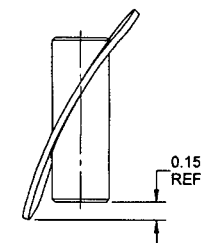
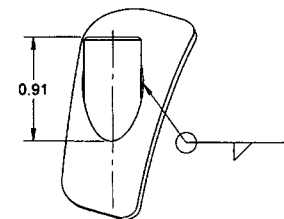
D3589-5
LATCH GUIDE



D3589-047 FORWARD GUIDE



D3589-19
AFT GUIDE PLATE



D3589-049 AFT GUIDE

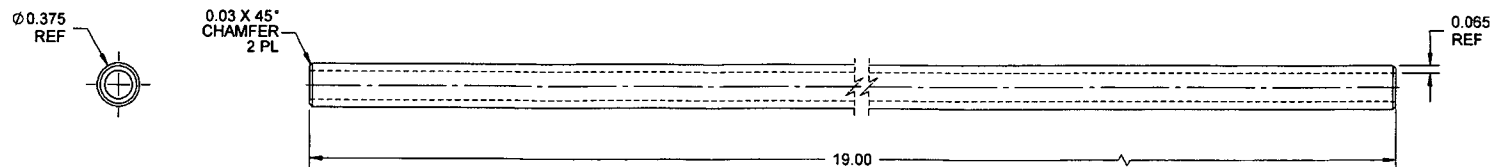
D3589-047/-049 NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT:
 - D3589-047 = 0.08 lbs
 - D3589-049 = 0.05 lbs
- 8) WELDING: PER DART QSI 004

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2012-07-16

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DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3589	REV. C
MFG. APPR.			SHEET 3 OF 8
APPROVED		TITLE LATCH ASSEMBLY	SCALE
DE APPR.			NTS
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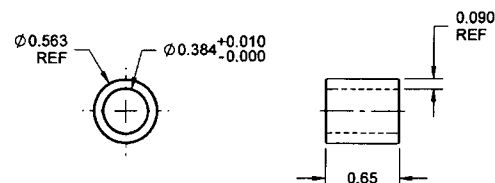
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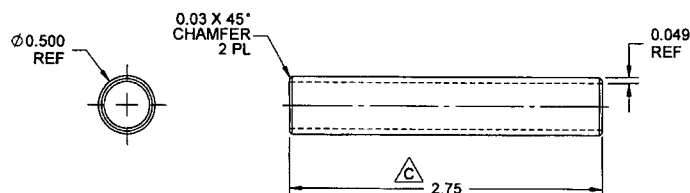
D3589-1 ARM



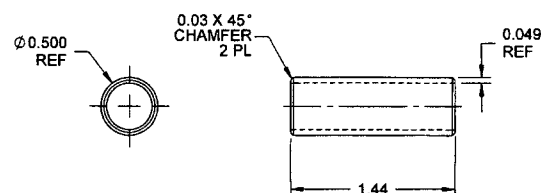
D3589-3 ARM GUIDE



D3589-23 ARM GUIDE



D3589-5 LATCH GUIDE



D3589-21 LATCH GUIDE

D3589-1/-3/-5/-21/-23 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SEAMLESS ROUND TUBING
 D3589-1: 0.375 O.D. X 0.065 WALL (REF. DART SPEC M304TR0.375W.065)
 D3589-3: 0.500 O.D. X 0.058 WALL (REF. DART SPEC M304TR0.500W.058)
 D3589-5/-21: 0.500 O.D. X 0.049 WALL (REF. DART SPEC M304TR0.500W.049)
 D3589-23: AISI 304/316 STAINLESS STEEL ROUND BAR PER ASTM A276 (REF. DART SPEC M304R)

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

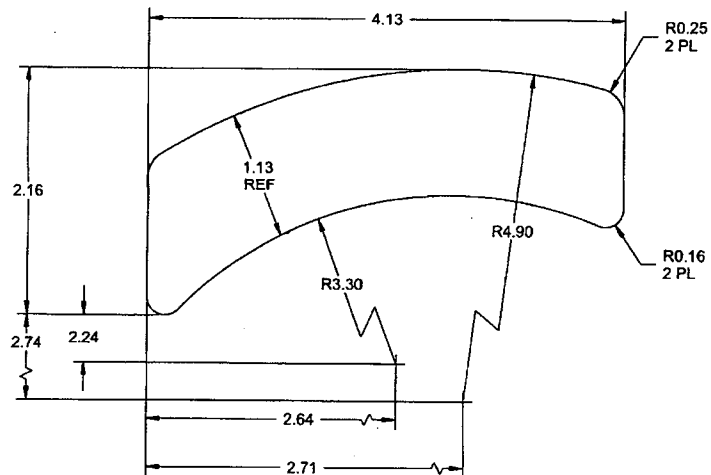
6) IDENTIFICATION: N/A

- 7) WEIGHT: - D3589-1 = 0.34 lbs
 - D3589-3 = 0.01 lbs
 - D3589-5 = 0.06 lbs
 - D3589-21 = 0.03 lbs
 - D3589-23 = 0.02 lbs

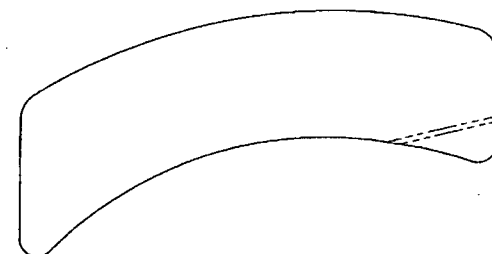
RELEASE
2012-07-16

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3589	SHEET 4 OF 8
APPROVED		TITLE	SCALE
DE APPR.		LATCH ASSEMBLY	NTS
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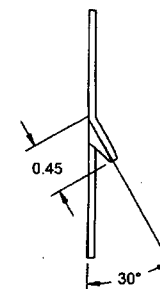
8 7 6 5 4 3 2 1



**D3589-7F AFT GUIDE PLATE
FLAT PATTERN**



**D3589-7 AFT GUIDE PLATE
MAKE FROM D3589-7F**

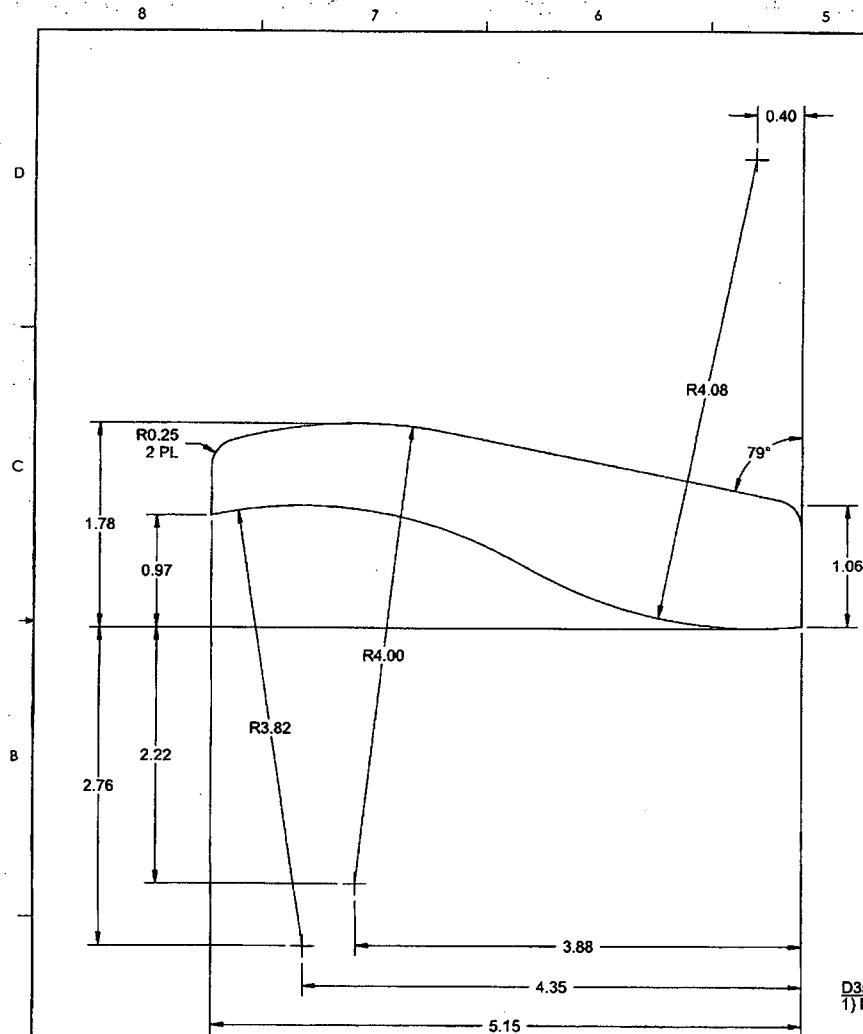


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2012-07-16
NW

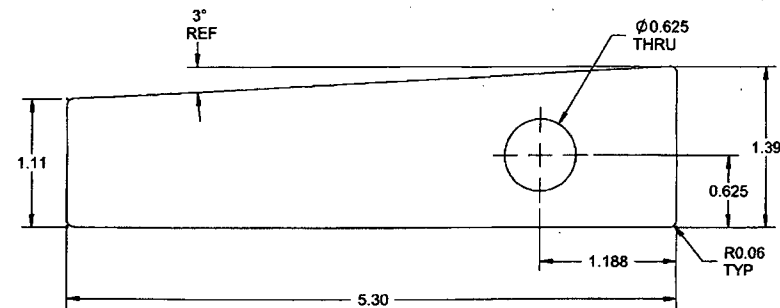
D3589-7F NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, PER AMS 5513 OR AMS 5524, OR MIL-S-5059 (ANNEALED) 2B FINISH
16 GAUGE (0.063 THICK), (REF. DART SPEC M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.09 lbs

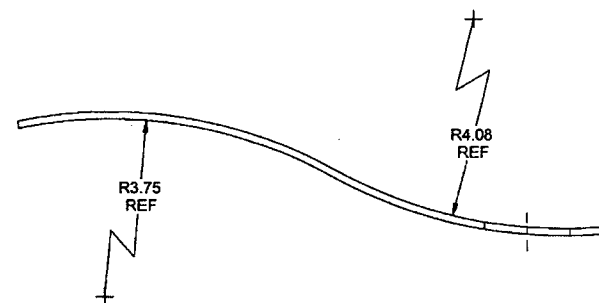
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3589	SHEET 5 OF 8
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D3589-9 FORWARD GUIDE PLATE



**D3589-11F FORWARD GUIDE PLATE
FLAT PATTERN**



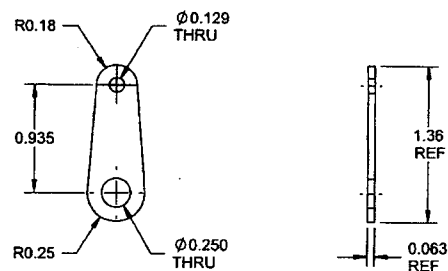
**D3589-11 FORWARD GUIDE PLATE
(MAKE FROM D3589-11F)**

D3589-9/-11/-11F NOTES:

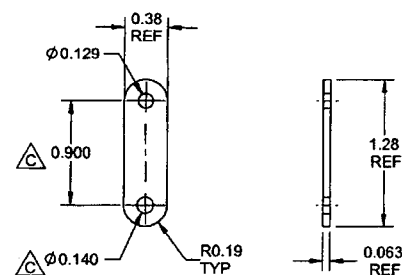
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, PER AMS 5513 OR AMS 5524, OR MIL-S-5059 (ANNEALED) 2B FINISH 16 GAUGE (0.063 THICK), (REF. DART SPEC M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.09 lbs EACH
- 8) CONTROL SHAPE PER DT9021 TEMPLATE

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3589	SHEET 6 OF 8
APPROVED		TITLE	SCALE
DE APPR.		LATCH ASSEMBLY	NTS
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2012-07-16



D3589-13 LUG



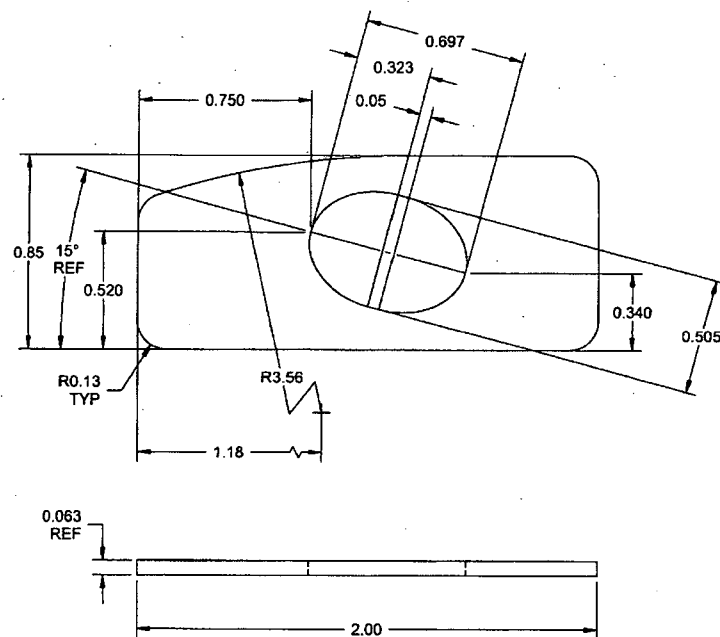
D3589-15 LINK

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2012-07-16
WD

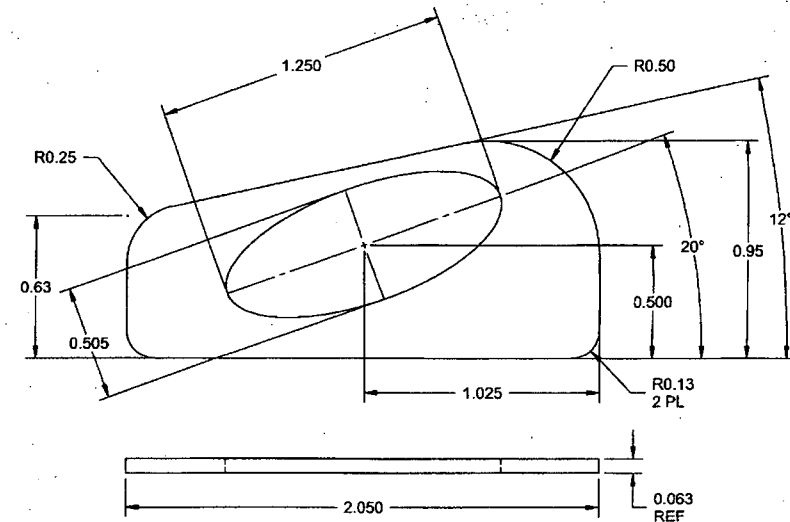
D3589-13-15 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, PER AMS 5513 OR AMS 5524, OR MIL-S-5059 (ANNEALED) 2B FINISH
16 GAUGE (0.063 THICK), (REF. DART SPEC M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.01 lbs EACH

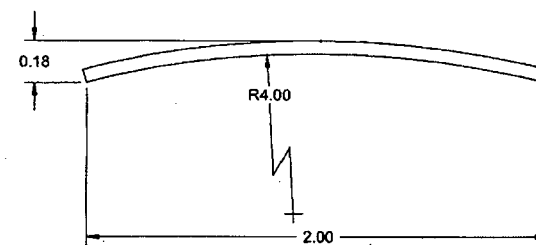
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3589	REV. C
MFG. APPR.		SHEET 7 OF 8	
APPROVED		TITLE LATCH ASSEMBLY	SCALE
DE APPR.		NTS	
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D3589-17 FORWARD GUIDE PLATE



D3589-19F AFT GUIDE PLATE FLAT PATTERN



D3589-19 AFT GUIDE PLATE
(MAKE FROM D3589-19F)

RELEASED
2012-07-16

D3589-17/-19/-19F NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, PER AMS 5513 OR AMS 5524, OR MIL-S-5059 (ANNEALED) 2B FINISH 16 GAUGE (0.063 THICK), (REF. DART SPEC M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.02 lbs EACH

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